

Commonwealth of Kentucky
Division for Air Quality

PERMIT APPLICATION SUMMARY FORM

Completed by:
Link Shumaker

GENERAL INFORMATION:

Name: Kentucky Electric Steel Acquisitions Company, LLC
Address: PO Box 2119 Ashland, KY 41105
Date Received: April 19, 2004
SIC Code: 3312
EIS/ID#: 21-019-00020
Log/AI#: 56490/337
Pemit #: V-05-030

APPLICATION TYPE/PERMIT ACTIVITY:

- | | |
|--|---|
| <input type="checkbox"/> Initial Issuance | <input type="checkbox"/> General Permit |
| <input type="checkbox"/> Permit Modification | <input type="checkbox"/> Conditional Major |
| <input type="checkbox"/> Administrative | <input checked="" type="checkbox"/> Title V |
| <input type="checkbox"/> Minor | <input checked="" type="checkbox"/> Synthetic Minor |
| <input type="checkbox"/> Significant | <input checked="" type="checkbox"/> Operating |
| <input checked="" type="checkbox"/> Permit Renewal | <input type="checkbox"/> Construction/Operating |

COMPLIANCE SUMMARY:

- | | |
|--|---|
| <input type="checkbox"/> Source is out of compliance | <input type="checkbox"/> Compliance schedule included |
| <input type="checkbox"/> Compliance certification signed | |

APPLICABLE REQUIREMENTS LIST:

- | | |
|---|--|
| <input type="checkbox"/> NSR | <input type="checkbox"/> NSPS |
| <input checked="" type="checkbox"/> PSD | <input checked="" type="checkbox"/> NESHAP |
| <input type="checkbox"/> Netted out of PSD/NSR | <input checked="" type="checkbox"/> SIP |
| Not major modification per 401 KAR | |
| <input type="checkbox"/> 51:017, 1(23)(b) or 401 KAR 51:052, 1(14)(b) | <input type="checkbox"/> Other |

MISCELLANEOUS:

- ☐ Acid rain source
- ☐ Source subject to 112(r)
- ☒ Source applied for federally enforceable emissions cap
- ☐ Source provided terms for alternative operating scenarios
- ☐ Source subject to a MACT standard
- ☐ Source requested case-by-case 112(g) or (j) determination
- ☐ Application proposed new control technology
- ☐ Certified by responsible official
- ☐ Diagrams or drawings included
- ☐ Confidential business information (CBI) submitted in application
- ☐ Pollution prevention measures
- ☒ Area is non-attainment (list pollutants):

BOYD COUNTY IS NON-ATTAINMENT FOR PM_{2.5}, SO₂ (SOUTHERN PART OF THE COUNTY), AND 8-HOUR OZONE

EMISSIONS SUMMARY:

Pollutant	CAS#	Actual Emissions (TPY)	Potential Emissions (TPY)
PM		118.66	126.48
PM₁₀		46.586	60.102
CO	630-08-0	548.682	760.097
NO_x		213.622	246.953
SO₂	7446-09-5	41.317	60.363
VOC		36.99	51.275
Lead	7439-92-1	0.009	0.006
Individual HAP			
Cd	7440-43-9	0.000273945	0.04529
Cr	7440-47-3	0.001	0.192
Mn	7469-96-5	0.013	2.125
Ni	7440-02-0	0.000210727	0.03484
Total HAP		0.023	3.878

SOURCE DESCRIPTION:

Kentucky Electric Steel Acquisitions, LLC (KESA) manufactures steel angles and bars from scrap metal utilizing two electric arc furnaces (EAFs) producing medium or low carbon steel. When the furnaces are tapped the metal is transferred to a ladle metallurgical furnace (LMF) to purify the molten steel and add the proper alloys. The molten metal is then transported by overhead crane to the continuous caster to cast billets. The source is also equipped with a billet reheat furnace. Billets are heated prior to rolling into angles and bars in the rolling mill.

This source has applied for a Title V renewal. KESA was issued a PSD permit, C-80-76, which limited the steel production from the two EAFs to 33 tph and 281,160 tpy. A PSD review was conducted in 1980 for CO (permit C-80-76). The Direct Shell Evacuation (DSE) system is innate to the EAFs and has been determined as BACT for the system. Since that review the annual steel production limit of 403,200 tpy has been established, and as long as that limit is maintained a new PSD review with regard to CO is not required. When KESA requested

increases in production rates to 48 tph and 403,200 tpy in their July 16, 1984 operating permit application, the Division issued Permit O-86-05, which allowed the increases without performing a PSD review. KESA's original Title V permit application requested additional increases to the production rates. When the Division reviewed the increases, it was determined that KESA should go through a PSD review. However, KESA wanted to avoid a PSD review and was granted an hourly increase in production rate to 68 tph while keeping the annual throughput at 403,200 tpy. It was Synthetic Minor (annual production limit on steel) to preclude PSD review for NOx. Also, the two EAFs are subject to 40 CFR 60 Subpart AA, as a New Source Performance Standard.